

### **Remarks**

These remarks are responsive to the Office action dated April 27, 2010. Prior to entry of this response, claims 1-5, 7-12, 14 and 19-28 were pending in the application. By this response, claims 1, 9, 14 and 25-26 are amended and claims 29-31 are added. Applicants respectfully request reconsideration of the application and allowance of the pending claims.

### **Interview Summary**

The undersigned thanks Examiners Kanaan and Barron for their consideration in the telephonic interview of 25 August 2010 in which claim 1 and Matchett were discussed. It was indicated that claim amendments further clarifying mouse data would distinguish Matchett. No agreement was reached concerning patentability of claims amended in this manner as further consideration and search would be necessary.

### ***Cited Art***

The Action cites:

1. Brown et al., U.S. Patent No. 5,557,686 (hereinafter "Brown");
2. Matchett, U.S. Patent No. 5,229,764 (hereinafter "Matchett");
3. Akiyama et al., U.S. Patent No. 5,768,387 (hereinafter "Akiyama");
4. Mizutome et al., U.S. Publication No. 2002/0078447 (hereinafter "Mizutome");
5. Boebert et al., U.S. Patent No. 5,596,718 (hereinafter "Boebert").

### ***Rejections under 35 U.S.C. § 103 in View of Brown, Matchett, and Akiyama***

Claims 1, 2, 4, 5, 7-12 and 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Matchett and Akiyama. This rejection is traversed.

Amended claim 1 recites, in part,:

a data interception unit configured to intercept inputs from a user that are directed to an application other than a user authentication application, wherein the data interception unit is configured to passively collect at least one of mouse movement data, mouse point and click data, and mouse drag and drop data generated in response to usage of the mouse in providing input to the application other than the user authentication application.

The proposed Brown/Matchett/Akiyama combination fails to disclose all the features of claim 1. Matchett discloses a thumbscanning and hand geometry mouse that permits user verification based on thumbscans and hand geometry. According to the Office action, thumbscanning and hand geometry data is collected using a mouse and therefore is mouse data. Although Applicants do not understand the term “mouse data” to include such data, claim 1 is amended to recite “the data interception unit is configured to passively collect at least one of *mouse movement data, mouse point and click data, and mouse drag and drop data.*” Matchett does not teach or suggest passive collection and interception of such data. Matchett provides special purpose data based on thumbscanning and hand geometry intended for user verification, and not interception of the recited mouse data. Indeed, because Matchett requires thumbscanning and/or hand geometry data for user verification, Matchett teaches away from the use of the recited mouse data. Brown and Akiyama fail to cure the deficiencies of Matchett. Brown fails to disclose collecting mouse data of any kind, and Akiyama discloses *active* collection of mouse data in response to a menu screen presented to the user. For at least this reason, claim 1 and dependent claims 2-5, 7-8, 19-20, 24, 27, and 29-31 are properly allowable.

Amended claim 9 recites, in part:

- receiving at least one of mouse movement data, mouse point and click data, and mouse drag and drop data associated with movement of a computer mouse in supplying data to a user application other than an authentication application;

- forwarding the received data to the user application;

- passively intercepting at least a portion of the received data and forwarding the intercepted portion to a behavioral processing unit; and processing the intercepted portion so as to develop a signature for a user.

The proposed Brown/Matchett/Akiyama combination fails to disclose all the features of claim 9. While Matchett discloses a mouse that includes thumbscanning and hand geometry reading, Matchett does not disclose passively intercepting received mouse movement data, mouse point and click data, and mouse drag and drop data. Matchett’s reliance on special adaptation of a mouse (to provide thumbscanning and hand geometry) teaches away from using mouse movement data, mouse point and click data, or mouse drag and drop data in user verification. Brown and Akiyama fail to cure the deficiencies of Matchett. Brown fails to disclose passively collecting mouse data of any kind, and Akiyama discloses active collection of mouse data in response to a menu screen

presented to the user. Because the proposed Brown/Matchett/Akiyama combination fails to disclose all the features of claim 9 (and in fact, teaches away from the claimed combination), claim 9 and its dependent claims 10-12, 14, 21-23, and 28 are properly allowable.

Amended claim 25 recites, in part:

a data interception unit configured to intercept inputs from a user that are directed to a user application other than an authentication application, wherein the data interception unit is configured to passively initiate collection of at least one of mouse movement data, mouse point and click data, and mouse drag and drop data;

a behavior analysis unit operatively coupled to said data interception unit to receive the passively collected mouse data.

The proposed Brown/Matchett/Akiyama combination fails to disclose all the features of claim 25. Matchett discloses thumbscanning and hand geometry data but Matchett does not disclose passively collecting mouse movement data, mouse point and click data, and mouse drag and drop data. Brown and Akiyama fail to cure the deficiencies of Matchett. Brown fails to disclose passively collecting mouse data of any kind, and Akiyama discloses *active* collection of mouse data in response to a menu screen presented to the user. For at least this reason, claim 25 is properly allowable.

Amended claim 26 recites, in part:

a data interception unit for receiving inputs from a user that are directed to a user application other than an authentication application, wherein the data interception unit is configured to transparently collect at least one of mouse movement data, mouse point and click data, and mouse drag and drop data generated in response to the user;

a behavior analysis unit operatively coupled to said data interception unit to receive the transparently collected mouse data; and

a behavior comparison unit operatively coupled to said behavior analysis unit, wherein said system dynamically monitors and passively collects behavioral biometric information, and translates said behavioral biometrics information into representative data, stores and compares different results, and outputs a user identity result.

The proposed Brown/Matchett/Akiyama combination fails to disclose all the features of claim 26. Matchett discloses thumbscanning and hand geometry data but Matchett does not disclose transparently collecting mouse movement data, mouse point and click data,

and mouse drag and drop data or coupling such data to a behavior analysis unit. Brown fails to disclose transparently collecting mouse data of any kind, and Akiyama discloses collection of mouse data in response to a menu screen presented to the user. For at least this reason, claim 26 is properly allowable.

***Rejections of Dependent Claims under 35 U.S.C. § 103***

Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Matchett and further in view of Akiyama and Mizutome. This rejection is traversed. Claim 27 depends from allowable claim 1, and is properly allowable for at least this reason. In order to expedite prosecution, additional reasons for the patentability of claim 27 are not belabored herein.

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Matchett and further in view of Akiyama and Boebert. This rejection is traversed. Claim 3 depends from allowable claim 1, and is properly allowable for at least this reason. In order to expedite prosecution, additional reasons for the patentability of claim 3 are not belabored herein.

**Conclusion**

Applicants believe that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, Applicants respectfully request that the Examiner issue a Notice of Allowability covering the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

Please charge any cost incurred in the filing of this response, along with any other costs, to Deposit Account No. 02-4550.

Respectfully submitted,

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